

REMARKS

Claims 13-16, 18-22 and 24 are pending in the application. Claims 13-24 were rejected under the judicially created doctrine of double patenting over co-pending U.S. Patent Application Serial No. 09/796,759 (the '759 application), as described in paragraph 2 of the Office Action. Claims 13-24 were rejected under 35 U.S.C. §102(b), as described in paragraph 4 of the Office Action. Claims 13 and 19 are the only independent claims.

Claim 13 has been amended to recite that the retransmission decision is further based on bit rates of previously received data packets. Similarly, claim 19 has been amended to recite that the loss detection unit is operable to make a retransmission decision that is further based on bit rates of previously received data packets. The remainder of the amendments to claims 13 and 19 generally place the claims in better U.S. form without narrowing the scope of the claims as previously presented.

The '759 application discussed in paragraph 2 of the Office Action is now USPN 6,792,470 (the '470 patent). Further, claims 6-9, 14-17 and 22-25 of the '759 application have been renumbered as claims 1-12, respectively, in the '470 patent. Accordingly, the outstanding rejection under the judicially created doctrine of nonstatutory double patenting will be discussed with respect to claims 1-12 of the '470 patent.

MPEP § 804(II)(B) indicates that there are two situations for rejecting a claim of a utility application (when the rejection does not involve a Design/Plant patent) under the judicially created doctrine of nonstatutory double patenting. The first situation, as described in MPEP § 804(II)(B)(1), is obviousness-type double patenting, and exists when any claim in the application defines an invention that is merely an obvious variation of an invention claimed in a patent used to reject the claim. The second situation, as described in MPEP § 804(II)(B)(2), is illustrated by the facts before the court in *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968).

It is unclear from the Office Action, whether claims 13-24 were rejected under the judicially created doctrine of double patenting as described in MPEP § 804(II)(B)(1) or as described in MPEP § 804(II)(B)(2). Irrespective of which manner that the judicially created doctrine of double patenting was used to reject the claims, Applicants traverse the rejection of claims 13-16, 18-22 and 24 for the following reasons.

In the event that claims 13-16, 18-22 and 24 were rejected under the judicially created doctrine of obviousness-type double patenting, as described in MPEP § 804(II)(B)(1), the rejection should be withdrawn because the claims would not have been obvious variations of any of claims 1-12 of the '470 patent.

Paragraph 2 of the Office Action alleges that claims 6-9, 14-17 and 22-25 of the copending application include all limitations recited in present claims 13-24. Applicants traverse this allegation and the double patenting rejection for the following reasons.

Contrary to the allegation in paragraph 2 of the Office Action, claims 1-12 of the '470 patent **do not** include all limitations recited in present claims 13-16, 18-22 and 24. Specifically, none of claims 1-12 of the '470 patent recite or suggest making a retransmission decision as to whether a retransmission request for a missing data packet is to be sent, as recited in independent claim 13. Further, none of claims 1-12 of the '470 patent recite or suggest a loss detection unit that is operable to make a retransmission decision as to whether a retransmission request for a missing data packet is to be sent, as recited in independent claim 19.

In light of the above-discussed differences between claims 1-12 of the '470 patent and claims 13 and 19 of the present application, it is clear that claims 13 and 19, and the dependent claims 14-16, 18, 20-22 and 24, of the present application are patentable over claims 1-12 of the '470 patent.

Additionally, in light of the above-discussed differences between claims 1-12 of the '470 patent and claims 13-16, 18-22 and 24 of the present application, one of ordinary skill in the art at the time of the invention would not have been motivated to modify any of claims 1-12 of the '470 patent to arrive at the invention of any of claims 13-16, 18-22 and 24 of the present application. Therefore, it is clear that claims 13-16, 18-22 and 24 of the present application are not merely an

obvious variation of an invention claimed in the '470 patent and consequently are patentable over claims 1-4, 9 and 10 of the '470 patent.

In the event that claims 13-16, 18-22 and 24 were rejected under the judicially created doctrine of double patenting, as described in MPEP § 804(II)(B)(2), the rejection should additionally be withdrawn for the reasons discussed in *In re Schneller*. Specifically, claims 1-12 of the '470 patent do not provide protection for: making a retransmission decision as to whether a retransmission request for a missing data packet is to be sent, as recited in independent claim 13; or a loss detection unit that is operable to make a retransmission decision as to whether a retransmission request for a missing data packet is to be sent, as recited in independent claim 19. Further, the Applicants have not indicated that: deciding that a data packet is missing, sending the retransmission request and receiving a packet, as recited in independent claim 13; or a transmitter buffer unit and receiver buffer unit, as recited in independent claim 19, were old.

The Office Action then alleges that claims 13-24 are broader in scope than that of the claims in the copending application. Applicants traverse this allegation for the following reasons.

Because claims 13-16, 18-22 and 24 of the present application recite features not recited in claims 1-12 of the '470 patent, as discussed above, the scope of claims 13-16, 18-22 and 24 of the present application **is different** than the scope of claims 1-12 of the '470 patent. Further, because claims 13-16, 18-22 and 24 of the present application recite features not recited in claims 1-12 of the '470 patent, as discussed above, the scope of claims 13-16, 18-22 and 24 of the present application **are not broader** than the scope of claims 1-12 of the '470 patent.

In light of the above discussion, Applicants respectfully request that the outstanding rejection of claims 13-16, 18-22 and 24 under the judicially created doctrine of double patenting be withdrawn.

Claims 13-16, 18-22 and 24 are patentable over Zhu et al. (Zhu) for the following reasons.

According to one aspect of the present invention, the decision of whether to send a retransmission request is based on, among other things, the bit rates of previously received data packets. Therefore, in accordance with the present invention, the server and the receiver advantageously account for a bit rate that has resulted in successfully received data packets. The bit rates of previously received data packets is valuable information that may be used to dynamically optimize the transmission bandwidth to increase the likelihood of successfully transmitting data packets. Consequently, basing the decision on whether to send a retransmission request on, among other things, the bit rates of previously received data packets improves the performance of the system and enables a dynamically adaptable transmission quality in response to changing channel conditions. This feature, which is not disclosed or suggested in Zhu, is recited in the claims as discussed below.

As discussed above, amended claim 13 recites “**making a transmission decision, based on** channel conditions, importance of the missing data packet **and bit rates of previously received data packets**, as to whether the retransmission request for the missing data packet is to be sent.” Further, amended claim 19 recites a loss detection unit operable to “**make a retransmission decision, based on** channel conditions, importance of the missing data packet **and bit rates of previously received data packets**, as to whether a retransmission request for the missing data packet is to be sent.”

Zhu fails to disclose or suggest the above identified limitations.

Paragraph 4(d) of the Office Action asserts that Zhu discloses “determining a retransmission request based upon error rate and transmission delay (see col 5, line 48 - col 6, line 14).” The cited portion of Zhu discloses that feedback messages are sent as control messages from the client to the server and may include information on the identity of loss packets, predetermined bandwidth budget or estimated information loss rate on the packet network. As explicitly disclosed in column 5, lines 6-13 of Zhu, a key aspect of the reference is to determine whether or not to request a retransmission, or how many copies to request, based on a predetermined bandwidth budget, the estimated information loss rate on the packet network, “the importance of the lost packet and the remaining

number al allowed retransmission attempts for the packet.” However, Zhu does not disclose or suggest that the retransmission decision is based on **bit rates of previously received data packets**, as recited in each of independent claims 13 and 19.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed in a prior art reference, *Akzo N.V. v. U.S. Int’l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the above-discussed differences between the disclosure of Zhu and claims 13 and 19, it is clear that Zhu does not anticipate claims 13 or 19. Furthermore, because claims 14-16 and 18, and 20-22 and 24 are dependent upon claims 13 and 19, respectively, and therefore include all the limitations thereof, Zhu additionally does not anticipate claims 14-16, 18 20-22 and 24.

Still further, in light of the above-discussed differences between the invention recited in claims 13 and 19 and the disclosure of Zhu, one of ordinary skill in the art at the time of the invention would not have been motivated to modify Zhu to arrive at the invention as recited in independent claims 13 and 19. Accordingly, claims 13-16, 18-22 and 24 are patentable over Zhu within the meaning of 35 U.S.C. § 103.

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

Respectfully submitted,

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